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	Filing Date		2005-10-13	
	First Named Inventor	Samuel I. STUPP et al.		
	Art Unit	1654		
	Examiner Name	David Lukton		
	Attorney Docket Number	NANO 107 US2 (NU 22092)		

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	1	99/55383	WO	A2	1999-11-04	Cuthbertson et al.		<input type="checkbox"/>
	2	2004/091370	WO	A2	2004-10-28	Nugent et al.		<input type="checkbox"/>

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3	2005/014619	WO	A2	2005-02-17	San Antonio et al.		<input type="checkbox"/>
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	1	Kibbey, Maura C., Mathias Jucker, Benjamin S. Weeks, Rachael L. Neve, William E. Van Nostrand, and Hynda K. Kleinman. November 1993. "β-Amyloid Precursor Protein Binds to the Neurite-Promoting IKVAV Site of Laminin." Proc. Natl. Acad. Sci. U.S.A. Vol. 90, pp. 10150-10153.	<input type="checkbox"/>
	2	Oka, Kazunari, Masaaki Yamamoto, Toshiharu Nonaka, and Masamichi Tomonaga. April 1996. "The Significance of Artificial Cerebrospinal Fluid as Perfusate and Endoneurosurgery." Neurosurgery Online. Vol. 38, No. 4, pp. 733-736.	<input type="checkbox"/>
	3	Rapaport, Hanna, Kristian Kjaer, Torben R. Jensen, Leslie Leiserowitz, and David A. Tirrell. 2000. "Two-Dimensional Order in β-Sheet Peptide Monolayers." Journal of the American Chemical Society. Vol. 122, No. 50, pp. 12523-12529.	<input type="checkbox"/>
	4	Avrahami, Dorit and Yechiel Shai. 2002. "Conjugation of a Magainin Analogue with Lipophilic Acids Controls Hydrophobicity, Solution Assembly, and Cell Selectivity." Biochemistry. Vol. 41, No. 7, pp. 2254-2263.	<input type="checkbox"/>
	5	Yamada, Masanori, Yuichi Kadoya, Shingo Kasai, Kozue Kato, Mayumi Mochizuki, Norio Nishi, Nobuhisa Watanabe, Hynda K. Kleinman, Yoshihiko Yamada, and Motoyoshi Nomizu. 2002. "Ile-Lys-Val-Ala-Val (IKVAV)-Containing Laminin α1 Chain Peptides Form Amyloid-like Fibrils." FEBS Letters. Vol. 530, pp. 48-52.	<input type="checkbox"/>
	6	McGregor, Clare-Louise, Lu Chen, Neil C. Pomroy, Peter Hwang, Sandy Go, Avijit Chakrabarty, and Gilbert G. Privé. February 2003. "Lipopeptide Detergents Designed for the Structural Study of Membrane Proteins." Nature Biotechnology. Vol. 21, pp. 171-176.	<input type="checkbox"/>
	7	Ohmori, Hideya, Yasumitsu Sato, and Akiyoshi Namiki. 2004. "The Anticonvulsant Action of Propofol on Epileptiform Activity in Rat Hippocampal Slices." Anesth. Analg. Vol. 99, pp. 1095-1101.	<input type="checkbox"/>
	8	Shahraki, Ali and Trevor W. Stone. 2004. "Blockade of Presynaptic Adenosine A1 Receptor Responses by Nitric Oxide and Superoxide in Rat Hippocampus." European Journal of Neuroscience. Vol. 20, pp. 719-728.	<input type="checkbox"/>

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9	Sone, Eli D. and Samuel I. Stupp. 2004. "Semiconductor-Encapsulated Peptide-Amphiphile Nanofibers." Journal of the American Chemical Society. Vol. 126, No. 40, pp. 12756-12757.	<input type="checkbox"/>
10	Smith, L. A. and P. X. Ma. 2004. "Nano-Fibrous Scaffolds for Tissue Engineering." Colloids and Surfaces. B: Biointerfaces. Vol. 39, pp. 125-131.	<input type="checkbox"/>
11	Tsonchev, Stefan, George C. Schatz, and Mark A. Ratner. 2004. "Electrostatically-Directed Self-Assembly of Cylindrical Peptide Amphiphile Nanostructures." J. Phys. Chem. B. Vol. 108, No. 26, pp. 8817-8822.	<input type="checkbox"/>
12	Tsonchev, Stefan, Alessandro Troisi, George C. Schatz, and Mark A. Ratner. 2004. "All-Atom Numerical Studies of Self-Assembly of Zwitterionic Peptide Amphiphiles." J. Phys. Chem. B. Vol. 108, No. 39, pp. 15278-15284.	<input type="checkbox"/>
13	Tsonchev, Stefan, Alessandro Troisi, George C. Schatz, and Mark A. Ratner. 2004. "On the Structure and Stability of Self-Assembled Zwitterionic Peptide Amphiphiles: A Theoretical Study." Nano Letters. Vol. 4, No. 3, pp. 427-431.	<input type="checkbox"/>
14	Arnold, Michael S., Mustafa O. Guler, Mark C. Hersam, and Samuel I. Stupp. 2005. "Encapsulation of Carbon Nanotubes by Self-Assembling Peptide Amphiphiles." Langmuir. Vol. 21, No. 10, pp. 4705-4709.	<input type="checkbox"/>
15	Behanna, Heather A., Jack J. J. M. Donners, Alex C. Gordon, and Samuel I. Stupp. 2005. "Coassembly of Amphiphiles with Opposite Peptide Polarities into Nanofibers." Journal of the American Chemical Society. Vol. 127, No. 4, pp. 1193-1200.	<input type="checkbox"/>
16	Bitton, Ronit, Judith Schmidt, Markus Biesalski, Raymond Tu, Matthew Tirrell, and Havazelet Bianco-Peled. 2005. "Self-Assembly of Model DNA-Binding Peptide Amphiphiles." Langmuir. Vol. 21, No. 25, pp. 11888-11895.	<input type="checkbox"/>
17	Bull, Steve R., Mustafa O. Guler, Rafael E. Bras, Palamadai N. Venkatasubramanian, Samuel I. Stupp, and Thomas J. Meade. 2005. "Magnetic Resonance Imaging of Self-Assembled Biomaterial Scaffolds." Bioconjugate Chem. Vol. 16, No. 6, pp. 1343-1348.	<input type="checkbox"/>
18	de Loos, Maaïke, Ben L. Feringa, and Jan H. van Esch. 2005. "Design and Application of Self-Assembled Low Molecular Weight Hydrogels." Eur. J. Org. Chem. Pp. 3615-3631.	<input type="checkbox"/>
19	Guler, Mustafa O., Randal C. Claussen, and Samuel I. Stupp. 2005. "Encapsulation of Pyrene Within Self-Assembled Peptide Amphiphile Nanofibers." Journal of Materials Chemistry. Vol. 15, pp. 4507-4512.	<input type="checkbox"/>

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20	Guler, Mustafa O., Jonathan K. Pokorski, Daniel H. Appella, and Samuel I. Stupp. 2005. "Enhanced Oligonucleotide Binding to Self-Assembled Nanofibers." <i>Bioconjugate Chem.</i> Vol. 16, No. 3, pp. 501-503.	<input type="checkbox"/>
21	Jun, Ho-Wook, Virany Yuwono, Sergey E. Paramonov, and Jeffrey D. Hartgerink. 2005. "Enzyme-Mediated Degradation of Peptide-Amphiphile Nanofiber Networks." <i>Adv. Mater.</i> Vol. 17, pp. 2612-2617.	<input type="checkbox"/>
22	Silva, Gabriel A. 2005. "Nanotechnology Approaches for the Regeneration and Neuroprotection of the Central Nervous System." <i>Surgical Neurology.</i> Vol. 63, pp. 301-306.	<input type="checkbox"/>
23	Silva, Gabriel A. 2005. "Small Neuroscience: The Nanostructure of the Central Nervous System and Emerging Nanotechnology Applications." <i>Current Nanoscience.</i> Vol. 1, No. 3, pp. 225-236.	<input type="checkbox"/>
24	Solis., F. J., S. I. Stupp, and M. Olvera de la Cruz. 2005. "Charge Induced Pattern Formation on Surfaces: Segregation in Cylindrical Micelles of Cationic-Anionic Peptide-Amphiphiles." <i>The Journal of Chemical Physics.</i> Vol. 122, No. 5, 054905-1-054905-9.	<input type="checkbox"/>
25	Tovar, John D., Randal C. Claussen, and Samuel I. Stupp. 2005. "Probing the Interior of Peptide Amphiphile Supramolecular Aggregates." <i>Journal of the American Chemical Society.</i> Vol. 127, No. 20, pp. 7337-7345.	<input type="checkbox"/>
26	Hosseinkhani, Hossein, Mohsen Hosseinkhani, and Hisatoshi Kobayashi. July 2006. "Design of Tissue-Engineered Nanoscaffold Through Self-Assembly of Peptide Amphiphile." <i>Journal of Bioactive and Compatible Polymers.</i> Vol. 21, No. 4, pp. 277-296.	<input type="checkbox"/>
27	Engler, Adam J., Shamik Sen, H. Lee Sweeney, and Dennis E. Discher. August 25, 2006. "Matrix Elasticity Directs Stem Cell Lineage Specification." <i>Cell.</i> Vol. 126, pp. 677-689.	<input type="checkbox"/>
28	Brunsveld, L., J. Kuhlmann, and H. Waldmann. 2006. "Synthesis of Palmitoylated Ras-Peptides and -Proteins." <i>Methods.</i> Vol. 40, pp. 151-165.	<input type="checkbox"/>
29	Elgersma, Ronald C., Tania Meijneke, Remco de Jong, Arwin J. Brouwer, George Posthuma, Dirk T. S. Rijkers, and Rob M. J. Liskamp. 2006. "Synthesis and Structural Investigations of N-alkylated $\beta$ -peptidosulfonamide-peptide Hybrids of the Amyloidogenic Amylin(20-29) Sequence: Implications of Supramolecular Folding for the Design of Peptide-Based Bionanomaterials." <i>Organic &amp; Biomolecular Chemistry.</i> Vol. 4, pp. 3587-3597.	<input type="checkbox"/>
30	Guler, Mustafa O., Lorraine Hsu, Stephen Soukasene, Daniel A. Harrington, James F. Hulvat, and Samuel I. Stupp. 2006. "Presentation of RGDS Epitopes on Self-Assembled Nanofibers of Branched Peptide Amphiphiles." <i>Biomacromolecules.</i> Vol. 7, No. 6, pp. 1855-1863.	<input type="checkbox"/>

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31	Harrington, Daniel A., Earl Y. Cheng, Mustafa O. Guler, Leslie K. Lee, Jena L. Donovan, Randal C. Claussen, and Samuel I. Stupp. 2006. "Branched Peptide-Amphiphiles as Self-Assembling Coatings for Tissue Engineering Scaffolds." Journal of Biomedical Materials Research Part A. Pp. 157-167.	<input type="checkbox"/>
32	Hosseinkhani, Hossein, Mohsen Hosseinkhani, Ali Khademhosseini, Hisatoshi Kobayashi, and Yasuhiko Tabata. 2006. "Enhanced Angiogenesis Through Controlled Release of Basic Fibroblast Growth Factor from Peptide Amphiphile for Tissue Regeneration." Biomaterials. Vol. 27, pp. 5836-5844.	<input type="checkbox"/>
33	Mardilovich, Anastasia, Jennifer A. Craig, Matthew Q. McCammon, Ashish Garg, and Efrosini Kokkoli. 2006. "Design of a Novel Fibronectin-Mimetic Peptide-Amphiphile for Functionalized Biomaterials." Langmuir. Vol. 22, No. 7, pp. 3259-3264.	<input type="checkbox"/>
34	Paramonov, Sergey E., Ho-Wook Jun, and Jeffrey D. Hartgerink. 2006. "Self-Assembly of Peptide-Amphiphile Nanofibers: The Roles of Hydrogen Bonding and Amphiphilic Packing." Journal of the American Chemical Society. Vol. 128, No. 22, pp. 7291-7298.	<input type="checkbox"/>
35	Rajangam, Kanya, Heather A. Behanna, Michael J. Hui, Xiaoqiang Han, James F. Hulvat, Jon W. Lomasney, and Samuel I. Stupp. 2006. "Heparin Binding Nanostructures to Promote Growth of Blood Vessels." Nano Letters. Vol. 6, No. 9, pp. 2086-2090.	<input type="checkbox"/>
36	Reches, Meital and Ehud Gazit. 2006. "Molecular Self-Assembly of Peptide Nanostructures: Mechanism of Association and Potential Uses." Current Nanoscience. Vol. 2, No. 2, pp. 105-111.	<input type="checkbox"/>
37	Stendahl, John C., Mukti S. Rao, Mustafa O. Guler, and Samuel I. Stupp. 2006. "Intermolecular Forces in the Self-Assembly of Peptide Amphiphile Nanofibers." Advanced Functional Materials. Vol. 16, pp. 499-508.	<input type="checkbox"/>
38	Behanna, Heather A., Kanya Rajangam, and Samuel I. Stupp. 2007. "Modulation of Fluorescence Through Coassembly of Molecules in Organic Nanostructures." Journal of the American Chemical Society. Vol. 129, No. 2, pp. 321-327.	<input type="checkbox"/>
39	Meijer, Joris T., Marjolijn Roeters, Valentina Viola, Dennis W. P. M. Löwik, Gert Vriend, and Jan C. M. van Hest. 2007. "Stabilization of Peptide Fibrils by Hydrophobic Interaction." Langmuir. Vol. 23, No. 4, pp. 2058-2063.	<input type="checkbox"/>

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